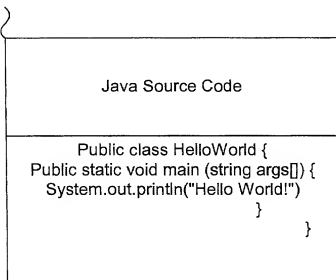
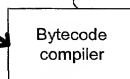


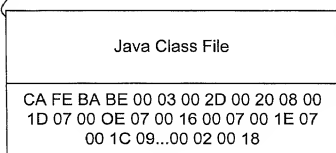
101



103



105



107

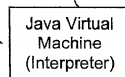


Fig. 1A

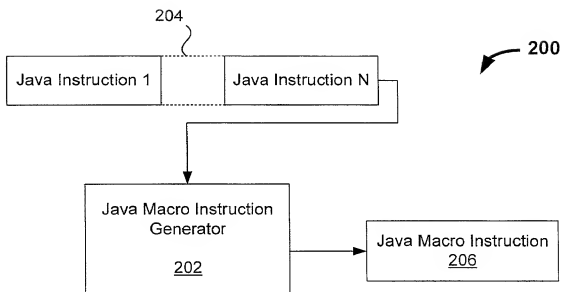


Fig. 2A

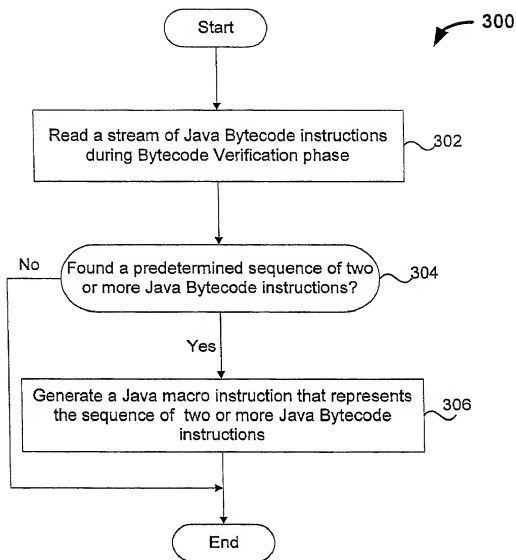


Fig. 3

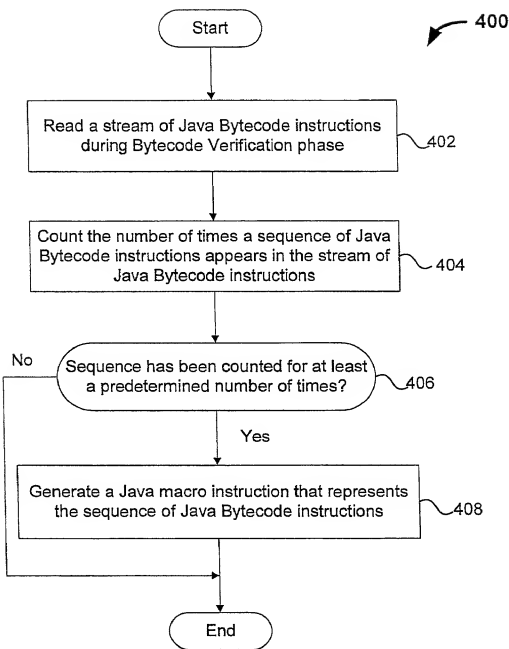


Fig. 4

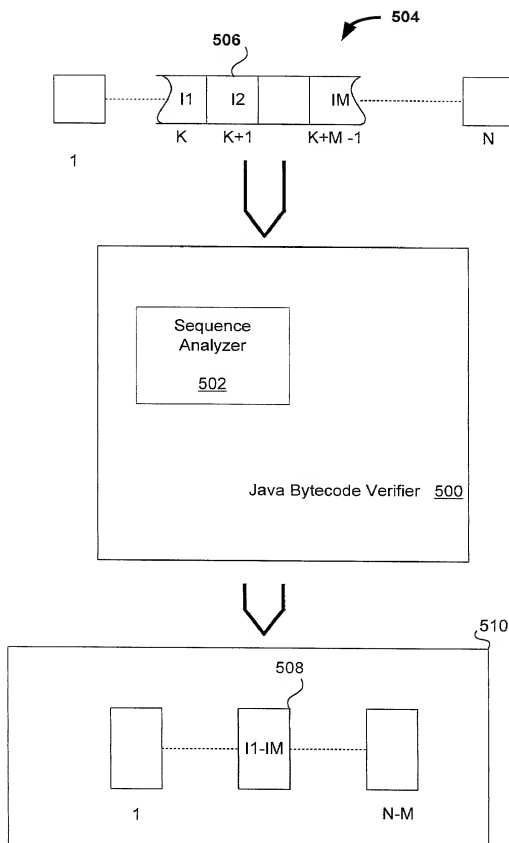


Fig. 5

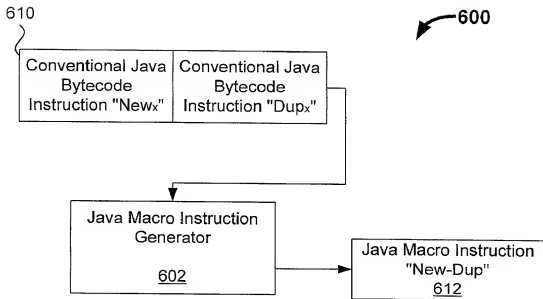


Fig. 6A

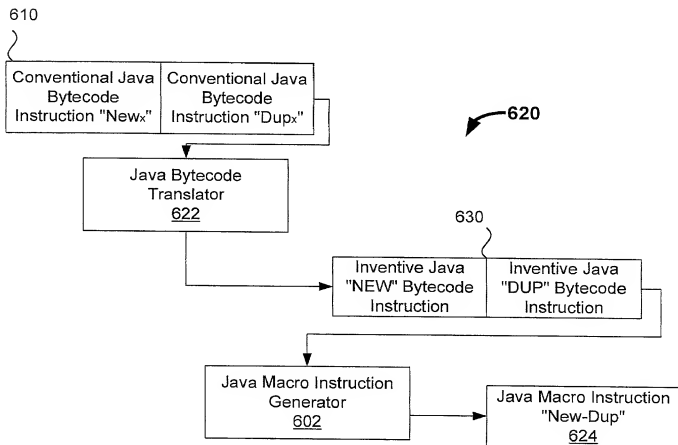


Fig. 6B

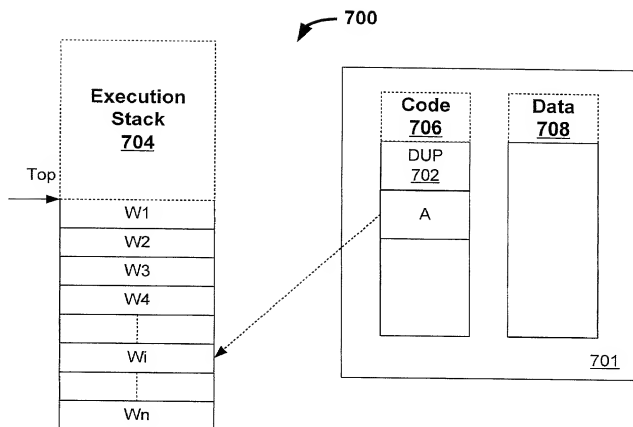


Fig. 7A

DUP

| |
|--------|
| Dup |
| Dup_x1 |
| Dup_x2 |

DUPL

| |
|---------|
| Dup2 |
| Dup2_x1 |
| Dup2_x2 |

NEW

| |
|----------------|
| New |
| Newarray |
| Anewarray |
| Multianewarray |

Fig. 7B

Fig. 7C

Fig. 8

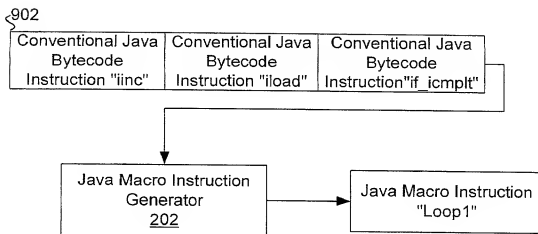


Fig. 9A

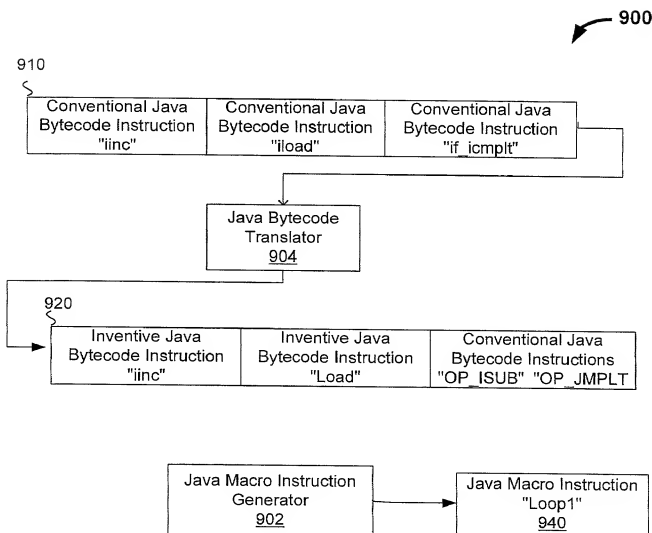


Fig. 9B

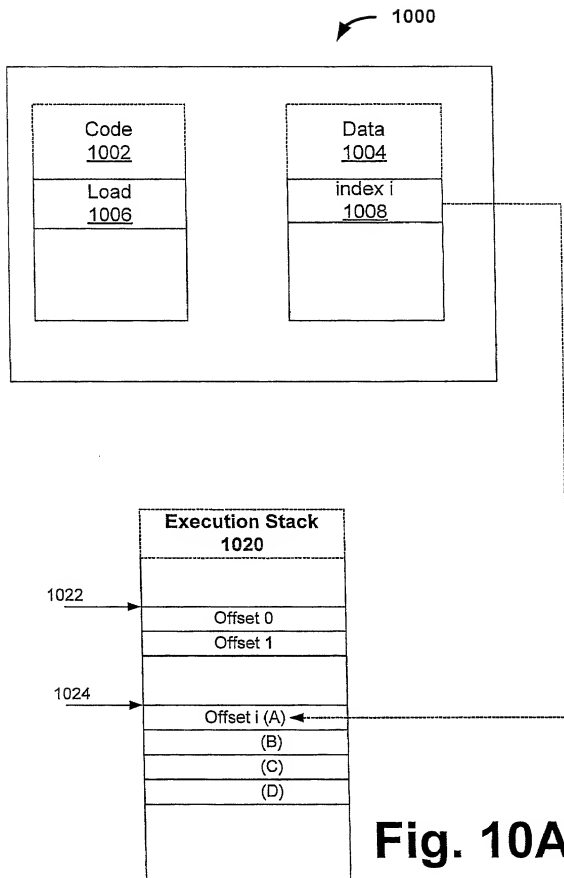


Fig. 10A

LOAD

| |
|---------|
| iload |
| fload |
| aload |
| iload_0 |
| iload_1 |
| iload_2 |
| iload_3 |
| fload_1 |
| fload_2 |
| fload_3 |
| aload_0 |
| aload_1 |
| aload_2 |
| aload_3 |

Fig. 10B

LOADL

| |
|---------|
| lload |
| dload |
| lload_0 |
| lload_1 |
| lload_2 |
| lload_3 |
| fload_0 |
| dload_0 |
| dload_1 |
| dload_2 |
| dload_3 |

Fig. 10C

| | |
|-------|-------------------|
| lcmp | OP_LSUB, OP_JMPEQ |
| fcmpl | OP_FSUB, OP_JMPLE |
| fcmpg | OP_FSUB, OP_JMPGE |
| dcmpl | OP_DCMP, OP_JMPLE |
| dcmpg | OP_DCMP, OP_JMPGE |

Fig. 11A

| | |
|-----------|-------------------|
| if_icmpeq | OP_ISUB, OP_JMPEQ |
| if_icmpne | OP_ISUB, OP_JMPNE |
| if_icmplt | OP_ISUB, OP_JMPLT |
| if_icmpge | OP_ISUB, OP_JMPGE |
| if_icmpgt | OP_ISUB, OP_JMPGT |
| if_icmple | OP_ISUB, OP_JMPLE |
| if_acmpeq | OP_ISUB, OP_JMPEQ |
| if_acmpne | OP_ISUB, OP_JMPNE |

Fig. 11B

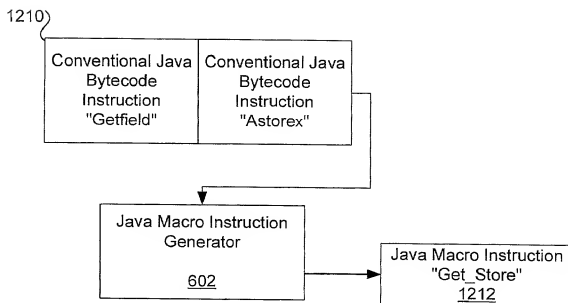


Fig. 12A

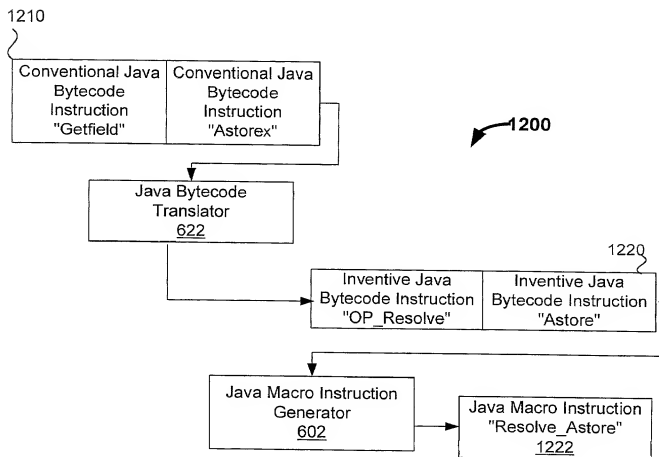


Fig. 12B

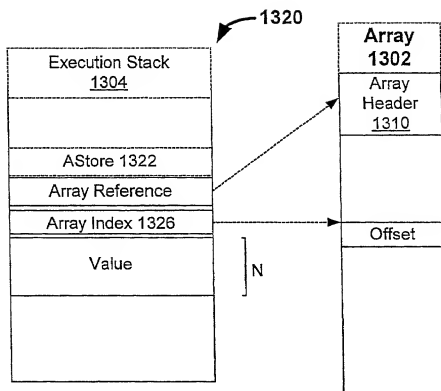


Fig. 13A

| ASTORE |
|---------|
| iastore |
| fastore |
| aastore |
| bastore |
| castore |
| sastore |

Fig. 13B

| ASTOREL |
|---------|
| lastore |
| dastore |

Fig. 13C